

# **Consulting Arborists**

Project No. TS - 4869

#### **Arborist Report**

TO: Cosmos Development Properties, Oscar Del Moro

SITE: 16135 NE 85<sup>th</sup> St, Redmond, WA 98052

RE: Tree Inventory & Assessment

DATE: June 23, 2015

PREPARED BY: Chris Madison

ISA Certified Arborist PN-7671A ISA Qualified Tree Risk Assessor

REVIEWED BY: J. Casey Clapp

ISA Certified Arborist PN-7475A ISA Qualified Tree Risk Assessor

#### **Summary**

Seventy-two (72) trees were assessed at the above addressed site. Thirty-six (36) of these trees are located within the property boundary, the additional thirty-six (36) trees are located adjacent to the site within the buffer survey area provided to us by the client. Seventy (70) trees meet the City of Redmond definition of a Significant tree; two (2) Douglas-fir (*Pseudotsuga menziesii*) trees meet the requirements of a Landmark tree.

The City of Redmond requires that 35 percent of site trees be retained during development. Of the thirty-four (34) Significant trees located within the property boundary, twelve (12) trees need to be retained to meet City requirements. The City also requires that all Landmark trees be retained (RZC 21.72).

The City of Redmond requires an exception request be submitted and approved for the removal or impact of any Landmark tree, as well as for the removal of more than 35-percent of the Significant trees on site. All Landmark trees removed must be replaced at a 3:1 ratio. Significant trees removed are to be replaced at a 1:1 ratio, except for those that are removed beyond the 35-percent retention minimum, which shall be replaced at a 3:1 ratio.

Obtain the necessary tree removal permission from the City of Redmond before beginning site development.

## **Assignment & Scope of Report**

This report outlines the site inspection by Chris Madison and Katie Hogan of Tree Solutions, Inc. on June 15, 2015. We were asked to tag, identify, and visually inspect all Significant trees on site, with reference to a 2010 site survey. We were asked to review the Redmond Zoning Code (RZC) requirements as they pertain to the project. We were asked to produce an Arborist Report including the tag number or other identifier, species, size, condition, drip line and designation of each tree as it relates to City code. Oscar

Del Moro, of Cosmos Development Properties, requested these services to acquire information for project planning purposes.

This information is preliminary as we were not provided with a proposed site plan prior to the inventory. In this report, we provide general tree protection requirements for the City of Redmond. As proposed site plans become available, we can provide more specific tree protection and retention recommendations.

Specifics for each tree can be found in the attached <u>Table of Trees</u>. A site map with tree locations can be found in the attached <u>Site Map with Mark ups</u> and <u>Adjacent Site Aerial with Mark ups</u>. An overview of the site we were asked to inventory can be found in <u>Figure 1: Aerial Site Photo</u>, which follows the report. Glossary and References follow the site maps. Limits of Assignment can be found in <u>Appendix A</u>. Methods can be found in <u>Appendix B</u>. Additional Assumptions and Limiting Conditions can be found in Appendix C.

#### **Observations**

## The Site

This 99,883 square-foot property is located in Downtown Redmond and was previously used as a United State Postal Service office space. The old Post Office building still stands on the site. The site is zoned as Town Square Zone (TSQ). There are no critical areas on site and the topography is flat. The site appeared to have been left unmaintained for some time. The extent of the site can be seen on the included site plans.

Besides the property surrounding the post office, we were asked to inventory additional areas surrounding the old post office site. These areas included the small planting strip running between the existing fire station and skate park, the small planting bed to the north of the transit center, and the side yard area just west of a small multi-family residential community.

#### The Trees

Thirty-six trees on site were tagged, measured, and assessed for health and structural condition. Two trees (trees 64 and 68) met the City definition of Landmark, having a diameter at standard height (DSH) equal to or greater than 30-inches. The remaining thirty-four trees meet the City definition of a healthy Significant tree.

An additional thirty-six trees on property adjacent to the subject property were also tagged or marked with a red paint pen and assessed. All of these trees met the City definition of a healthy Significant tree.

Ten Norway maple (*Acer platanoides*) trees are located on the north side of the property near the existing entrance (Trees 54-63). Several of these trees have multiple leaders attached from a single point and small sized dead wood present in the canopies. Overall, this cluster of maple trees is in fair to good health and structural condition and are strong candidates for retention.

Trees 64 and 68 are Douglas-fir (*Pseudotsuga menziesii*) trees which we measured to be 30 inches DSH or greater. Due to their size, they both classify as Landmark trees within the City of Redmond. Both trees were found to be in good health and structural condition and are strong candidates for retention. If these trees are retained, the crowns should be cleaned to remove dead parts hanging in the canopy.

Over extended branches should be reduced, and all invasive English ivy (*Hedera helix*) should be removed from the tree bases.

Trees 65 and 66 are non-significant Pacific madrone (*Arbutus menziesii*) trees in good health and structural condition. The trees are located near the Landmark Douglas-fir trees. Tree 66 lays on the western property line and may have shared ownership with the Redmond Fire Department to the west. This grouping of trees has a fairly high retention value, as they are all native species in good condition and located on the property edge.

Trees A through J are located outside of the subject property—all of these trees were marked with red paint pen. The trees are all in fair to good health and structural condition. Some of the trees had obstruction from infrastructure and girdling roots.

Trees 77 through 91 are located on the Redmond Fire Department property, tax parcel number 022505-9159. These trees were planted between the fire station and skate park to the south. The row is comprised of native Douglas-fir and western redcedar (*Thuja plicata*) trees. All these trees are in fair to good health and structural condition.

Tree 92 is a black cottonwood (*Populus trichocarpa*) located in the Edge Skate Park, tax parcel number 022505-9094. This tree has a multiple stemmed form, and a single stem DSH equivalent of 26.6 inches. The tree has three large leaders greater than 20.0 inches DSH and is in good health and structural condition. This tree is adjacent to an open space near the skate park, and is a strong candidate for retention.

Along the south edge of the property, there are over thirty recently planted incense cedar (*Calocedrus decurrens*) trees. Only one of the incense cedar trees, Tree 93, is significant per City code (greater than 6 inches DSH). All of the other trees in this planting appeared to be in good health and structural condition and are strong candidates for retention.

There are three black pine (*Pinus nigra*) trees located along the eastern property line (Trees 97-99). Irrigation heads are present at the base of each tree. Large surface roots exist from each tree and the soils are relatively shallow. The tree canopies hang over the subject property to the west and depending on site plans, may require crown reduction pruning.

Trees 205 through 208 are cherry (*Prunus* sp.) trees that are located on the subject property. Tree 208 had poor structure; the other trees had no major issues other than dense invasive ivy coverage at the base.

Trees 211-213 and 215-216 are silver maple (*Acer saccharinum*) trees located on-site along the eastern property line. English ivy covers the base of the trees. All of these maples are in good health and structural condition and are strong candidates for retention.

Tree 214 is an 8.1 inch DSH Douglas-fir tree in good health and structure.

Tree 217 is a multi-stem arborvitae (*Thuja occidentalis*) tree located through the back gate at the southeast corner of the existing building. There are two arborvitae trees in this location, only one of which is greater than 6 inches DSH.

Trees 218, 220, 221, 222 are Norway maple trees located in the existing back parking lot. Trees 221 and 222 are growing in relatively small planting strips and have root obstruction caused by the parking lot infrastructure. There is visible tip dieback on both trees, and a visible girdling root on Tree 222. Overall, the Norway maple trees are mature and well-established and would be good retention trees for this site.

Tree 219 is a flowering cherry tree located along the southern fence line; this tree had a large surface root running along the curb. There are a few other non-significant cherry trees located along this fence.

#### Discussion

# Retained, Impacted, & Removed Trees

The Redmond Zoning Code (RZC) states that the tree protection area shall be a minimum of the drip line plus five additional radial feet added to the furthest extent of the drip line. Trees that are proposed to be retained, removed, or that may be impacted, should be shown on a Tree Preservation Plan.

The RZC states that a minimum of 35-percent of all significant trees on site shall be retained on any new development site, along with all Landmark trees, unless an exception has been applied for and granted. If the 35-percent retention level for significant trees is not achieved, each significant tree removed beyond 35-percent must be replaced at a 3:1 ratio.

An exception request must be filed with the City of Redmond in order to dip below the minimum amount of trees retained. The city would also like an individual exception request submitted for each impacted tree onsite. These individual requests are to understand the extent of the impact that each tree will receive.

Per Redmond City Code, a tree's viability is based on proposed site plans, rather than health or structural condition. A tree is considered viable for a site until it is found to conflict with proposed development.

# **Replacement Tree Requirements**

- Landmark trees to be replaced at 3:1
- Significant trees removed below the 65% maximum threshold to be replaced at 1:1
- Significant trees removed beyond the 35% minimum threshold to be replaced at 3:1

#### **Replacement Trees**

The Redmond Zoning Code states the following:

Replacement trees are to be a minimum of:

- Two-and-one-half-inch caliper at breast height for deciduous trees
- Six feet in height for evergreen trees
- The Administrator may consider smaller-sized replacement trees if the applicant can demonstrate that smaller trees are more suited to the species, the site conditions, and the

purposes of this section, and that such trees will be planted in sufficient quantities to meet the intent of this section.

- Replacement trees shall be primarily native species in order to restore and enhance the site as nearly as practicable to its pre-development character.
- The condition of replacement trees shall meet or exceed current American Nursery and Landscape Association or equivalent organization's standards for nursery stock.
- Installation of required replacement trees shall be in accordance with best management practices for landscaping which ensure the tree's long-term health and survival.
- All required tree replacement and other required mitigation shall be bonded or completed prior to issuance of a building permit.

<u>Tree Protection Measures</u>: To ensure long-term viability of trees and stands identified for protection, permit plans, and construction activities shall comply with the following minimum required tree protection:

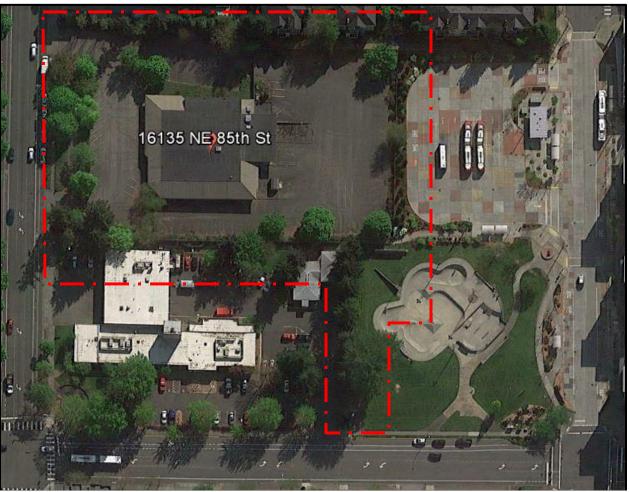
- All minimum required tree protection measures shall be shown on the tree protection and replacement plan.
- All construction activities, including staging and traffic areas, shall be prohibited within five feet of the drip line of protected trees.
- Tree protection barriers shall be installed five feet beyond the drip line of significant trees to be protected prior to any land disturbance.
- Tree protection barriers shall be a minimum of four feet high, constructed of chain link, or
  polyethylene laminar safety fencing or similar material, subject to approval by
  the Administrator. On large or multiple-project sites, the Administrator may also require
  that signs requesting subcontractor cooperation and compliance with tree protection
  standards be posted at site entrances.
- Where tree protection areas are remote from areas of land disturbance, and where approved by the Administrator, alternative forms of tree protection may be used in lieu of tree protection barriers, provided that protected trees are completely surrounded with continuous rope or flagging and are accompanied by "Tree Save Area Keep Out" signs.

<u>Preventative Measures</u>: In addition to the above minimum tree protection measures, the applicant shall support tree protection efforts by employing, as appropriate, the following preventative measures, consistent with best management practices for maintaining the health of the tree:

- Pruning of visible deadwood on trees to be protected or relocated;
- Application of fertilizer to enhance the vigor of stressed trees;
- Use of soil amendments and soil aeration in tree protection and planting areas;
- Mulching over tree drip line areas; and
- Ensuring proper water availability during and immediately after construction.

<u>Alternative Methods</u>: The Administrator may approve the use of alternative tree protection techniques if a protected tree will be protected to an equal or greater degree than through the techniques listed above.

# **Aerial Site Photo**



<u>Figure 1-</u> Red line indicates rough area of inventory scope. We did not have any survey information of the surrounding areas or development plans.

#### **Glossary**

**co-dominant stems:** stems or branches of nearly equal diameter, often weakly attached (Matheny *et al.* 1998)

**crown/canopy:** the aboveground portions of a tree (Lilly 2001)

**DSH:** diameter at standard height; the diameter of the trunk measured 54 inches (4.5 feet) above grade (Matheny *et al.* 1998)

ISA: International Society of Arboriculture

**included bark:** bark that becomes embedded in a crotch between branch and trunk or between codominant stems and causes a weak structure (Lilly 2001)

**Landmark tree:** A healthy tree with a DSH greater than 30-inches (RZC) **significant size:** A healthy tree measuring 6-inches DSH or greater (RZC)

**structural defects:** flaws, decay, or other faults in the trunk, branches, or root collar of a tree, which may lead to failure (Lilly 2001)

#### References

ANSI A300 (Part 1) – 2008 American National Standards Institute. <u>American National Standard for Tree Care Operations</u>: Tree, Shrub, and Other Woody Plant Maintenance: Standard Practices (Pruning). New York: Tree Care Industry Association, 2008.

Dunster & Associates Environmental Consultants Ltd. <u>Assessing Trees in Urban Areas and the Urban-</u> Rural Interface, US Release 1.0. Silverton: Pacific Northwest Chapter ISA, 2006.

Lilly, Sharon. <u>Arborists' Certification Study Guide</u>. Champaign, IL: The International Society of Arboriculture, 2001.

Matheny, Nelda and James R. Clark. <u>Trees and Development: A Technical Guide to Preservation of Trees During Land Development.</u> Champaign, IL: International Society of Arboriculture, 1998.

Mattheck, Claus and Helge Breloer, <u>The Body Language of Trees.</u>: A Handbook for Failure Analysis. London: HMSO, 1994.

Redmond Zoning Code. http://www.codepublishing.com/WA/redmond.html (Accessed November 13, 2013).

## Appendix A - Limits of Assignment

Unless stated otherwise: 1) information contained in this report covers only those trees that were examined and reflects the condition of those trees at the time of inspection; and 2) the inspection is limited to visual examination of the subject trees without dissection, excavation, probing, climbing, or coring unless explicitly specified. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future.

Tree Solutions did not review any reports or perform any tests related to the soil located on the subject property unless outlined in the scope of services. Tree Solutions staff are not and do not claim to be soils experts. An independent inventory and evaluation of the site's soil should be obtained by a qualified professional if an additional understanding of the site's characteristics is needed to make an informed decision.

# **Appendix B - Methods**

We evaluated tree health and structure utilizing visual tree assessment (VTA) methods. The basis behind VTA is the identification of symptoms, which the tree produces in reaction to a weak spot or area of mechanical stress. A tree reacts to mechanical and physiological stresses by growing more vigorously to re-enforce weak areas, while depriving less stressed parts (Mattheck & Breloer 1994). An understanding of the uniform stress allows me to make informed judgments about the condition of a tree.

We used a laser rangefinder to determine distances and heights.

We measured the diameter of each tree at 54 inches above grade, diameter at standard height (DSH).

If a tree has multiple stems, I measured each stem individually at standard height and determined a single-stem equivalent diameter by taking the average of the stem diameters, per Redmond Zoning Code.

## **Appendix C - Assumptions & Limiting Conditions**

- 1. Consultant assumes that any legal description provided to Consultant is correct and that title to property is good and marketable. Consultant assumes no responsibility for legal matters. Consultant assumes all property appraised or evaluated is free and clear, and is under responsible ownership and competent management.
- 2. Consultant assumes that the property and its use do not violate applicable codes, ordinances, statutes or regulations.
- 3. Although Consultant has taken care to obtain all information from reliable sources and to verify the data insofar as possible, Consultant does not guarantee and is not responsible for the accuracy of information provided by others.
- 4. Client may not require Consultant to testify or attend court by reason of any report unless mutually satisfactory contractual arrangements are made, including payment of an additional fee for such Services as described in the Consulting Arborist Agreement.
- Unless otherwise required by law, possession of this report does not imply right of publication or use for any purpose by any person other than the person to whom it is addressed, without the prior express written consent of the Consultant.
- 6. Unless otherwise required by law, no part of this report shall be conveyed by any person, including the Client, the public through advertising, public relations, news, sales or other media without the Consultant's prior express written consent.
- 7. This report and any values expressed herein represent the opinion of the Consultant, and the Consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event or upon any finding to be reported.
- 8. All photographs included in this report were taken by Tree Solutions Inc. during the documented site visit, unless otherwise noted.
- 9. Sketches, drawings and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by Consultant as to the sufficiency or accuracy of the information.
- 10. Unless otherwise agreed, (1) information contained in this report covers only the items examined and reflects the condition of the those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, climbing, or coring. Consultant makes no warranty or guarantee, express or implied, that the problems or deficiencies of the plans or property in question may not arise in the future.
- 11. Loss or alteration of any part of this Agreement invalidates the entire report.



Date of Inventory: 06/15/2015 Table Prepared: 06/16/2015

66 Arbutus menziesii 67 Prunus serru 68 Pseudotsuga menziesii				65 Arbutus menziesii	64 Pseudots menziesii	63 Acer p	62 Acer p	61 Acer p	60 Acer p	59 Acer p	58 Acer p	57 Acer p	56 Acer p	55 Acer p	54 Acer p	Tree Scier	
esii	otsuga	Prunus serrulata	ii	ii	Pseudotsuga menziesii	Acer platanoides	Acer platanoides	Acer platanoides	Acer platanoides	Acer platanoides	Acer platanoides	Acer platanoides	Acer platanoides	Acer platanoides	Acer platanoides	Scientific Name	
	Douglas-fir	Flowering cherry	Pacific madrone	Pacific madrone	Douglas-fir	Norway maple	Norway maple	Norway maple	Norway maple	Norway maple	Norway maple	Norway maple	Norway maple	Norway maple	Norway maple	Common Name	
	32.5	7.2	5.4*	<b>5</b> *	32	13.9	13.5	16.6	14	15.8	10.4	16.4	11.7	13.1	14.5	DSH (inches)	
	Good	Fair	Good	Good	Good	Good	Good	Good	Fair	Good	Good	Good	Good	Good	Good	Health Condition	
	Good	Fair	Good	Good	Good	Fair	Fair	Fair	Fair	Good	Good	Fair	Poor	Good	Good	Structural Condition	
	21	15.5	12.7	16.5	19	18	18	21	18	20	13.5	23	17	14	14.5	Drip North	
	18.5	13.5	4.5	∞	19	18	18	21	18	20	13.5	23	17	14	14.5	line Ra	
	17.5	15.5	10	3	19	18	18	21	18	20	13.5	23	17	14	14.5	Drip line Radius (feet) th	
	16	4	Л	13	19	18	18	21	18	20	13.5	23	17	14	14.5	et) West	
	Yes				Yes											Landmark Tree	
	Heavy ivy coverage, pruning cuts flush to tree trunk, moderate size dead wood in canopy, tree located mapped on survey	Heavy ivy coverage, multiple old pruning wounds, phototropic lean to east	*Multi-stemmed tree:5, 5.4, 5.8. Foliar fungus, possible shared tree with property to west, natrassia canker on southern stem	*Multi-stemmed tree: 4.7, 5.2. Foliar fungus, phototropic lean to north, canopy grows into Tree 64	Invasive ivy at base and climbing trunk, branch hangers to the east and north, overextended limbs	Invasive ivy at base and climbing trunk, co-dominant union with narrow angled attachment	Invasive ivy at base and climbing trunk, small sized dead wood in canopy, tip dieback	Invasive ivy at base and climbing trunk, old pruning flush cuts from crown raising	Invasive ivy at base and climbing trunk, multiple dead leaders, small sized dead wood in canopy, tip dieback	Invasive ivy at base and climbing trunk	Invasive ivy at base and climbing trunk	Invasive ivy at base and climbing trunk, many leads growing from one attachment point	Invasive ivy at base and climbing trunk, co-dominant union with narrow angled attachment	Invasive ivy at base and climbing trunk, cement block at tree base	Invasive ivy at base and climbing trunk	Notes	



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*Multi-stemmed tree: 7.4, 11.6. Invasive ivy at base, crown raised, suppressed leader to south		9	10	2	9	Good	Good	9.5*	Western redcedar	Thuja plicata	86
Invasive ivy at base, crown raised		17.5	17.5	16	20	Good	Good	17	Douglas-fir	Pseudotsuga menziesii	85
Invasive ivy at base, crown raised		13.5	13	13	13	Good	Good	14.9	Douglas-fir	Pseudotsuga menziesii	84
Invasive ivy at base, crown raised		7.5	7.5	7.5	18	Good	Good	13.9	Douglas-fir	Pseudotsuga menziesii	83
Invasive ivy at base, crown raised		12.5	12.5	5	18	Good	Good	13.6	Douglas-fir	Pseudotsuga menziesii	82
Invasive ivy at base, structural root to south, bow form		19	10	19	19	Good	Good	17.9	Douglas-fir	Pseudotsuga menziesii	81
Invasive ivy at base, old pruning wounds at base		4.5	10	4.5	10	Good	Good	7.8	Western redcedar	Thuja plicata	80
Invasive ivy at base		7	14	7	14	Good	Good	12.3	Douglas-fir	Pseudotsuga menziesii	79
Invasive ivy at base		6	10	6	10	Good	Good	10	Western redcedar	Thuja plicata	78
*Multi-stemmed tree: 7.2, 9.4. Invasive ivy at base		7.5	7.5	4.5	10	Fair	Good	8.3*	Western redcedar	Thuja plicata	77
*Multi-stemmed tree: 4.5, 5.9, 6.1. Minimal tip dieback		12	20	16	17	Good	Good	5.5*	Flowering cherry	Prunus serrulata	76
*Multi-stemmed tree: 4.2, 5.8. Minimal tip dieback		18.5	3	11.5	16	Fair	Good	5.0*	Flowering cherry	Prunus serrulata	75
**DSH measured at narrowest point below union, phototropic lean to east, minimal tip dieback		4	4	17	13.5	Fair	Good	9.5**	Flowering cherry	Prunus serrulata	74
**DSH measured at narrowest point below union		14.5	15	11.5	10.5	Good	Good	10.5**	Flowering cherry	Prunus serrulata	73
Minimal tip dieback, old topping cut, phototropic lean to north		11.5	15	10.5	12.5	Fair	Good	6.8	Flowering cherry	Prunus serrulata	72
**DSH measured at narrowest point below union		4	8	13.5	10	Good	Good	8.3**	Flowering cherry	Prunus serrulata	71
*Multi-stemmed tree: 6.3, 8.3. Tip dieback, sparse canopy		12.5	12	11	8.5	Fair	Poor	7.3*	Flowering cherry	Prunus serrulata	70
k Notes	Landmark Tree	et) West	adius (fe South	Drip line Radius (feet)	Dri North	Structural Condition	Health Condition	DSH (inches)	Common Name	Scientific Name	Tree ID



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203 <i>Acer</i>		202 Pseu	201 Pseu	100 Pseu	99 Pinu	98 Pinu	97 Pinu	96 Acer	95 Acer	94 Thuj	93 Calo	92 Populus trichoca	91 Pseu	90 Pseu	89 Pseu	88 Pseu	87 Thuj	Tree Scie
	Acer palmatum	Pseudotsuga menziesii	Pseudotsuga menziesii	Pseudotsuga menziesii	Pinus nigra	Pinus nigra	Pinus nigra	Acer rubrum	Acer rubrum	Thuja plicata	Calocedrus decurrens	Populus trichocarpa	Pseudotsuga menziesii	Pseudotsuga menziesii	Pseudotsuga menziesii	Pseudotsuga menziesii	Thuja plicata	Scientific Name
Japanese	Japanese maple	Douglas-fir	Douglas-fir	Douglas-fir	Black pine	Black pine	Black pine	Red maple	Red maple	Western redcedar	Incense cedar	Black cottonwood	Douglas-fir	Douglas-fir	Douglas-fir	Douglas-fir	Western redcedar	Common Name
5.9*	5.4*	14.8	14	15.5	10.4	7.5*	13.3	13	16.3	15.3	6.2	26.6*	16.1	15	21.4	17.5	7.9*	DSH (inches)
Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Health Condition
Good	Good	Good	Good	Good	Good	Fair	Good	Fair	Good	Good	Good	Good	Good	Good	Good	Good	Fair	Structural Condition
										5.5	4	35	16	18	18	18	9	Drip North
										5.5	4	41	16	9	15	11	8	line Ra East
										5.5	4	35	16	10	17	18	10	Drip line Radius (feet)
20.5	12.5	16.5	14.5	18.5	13	15.5	18.5	18	21	5.5	4	33	10.5	11	12.5	13	2	et) West
																		Landmark Tree
*Multi-stemmed tree: 3.6, 8.2.	*Multi-stemmed tree: 5.3, 5.5. Asymmetrical canopy			Good structural roots on surface, pruning for building clearance	Irrigation system near base, large surface roots, ball and burlap material present	*Multi-stemmed tree: 6.8, 8.2. Irrigation system near base, large surface roots, co-dominant union, suppressed canopy	Irrigation system near base, large surface roots	Included bark, co-dominant union with narrow angled attachment	Possible girdling roots, limited growing space	Clearance pruning on east side, shear pruning		*Multi-stemmed tree: 23.4, 25.7, 30.7. Old pruning wounds	Invasive ivy at base, crown raised	*Multi-stemmed tree: 4.5, 8.9, 10.4. Central leader - stem girdled by string, northern lead suppressed	Notes			



# Redmond, WA 98025 16135 NE 85th St **Table of Trees**

Date of Inventory: 06/15/2015 Table Prepared: 06/16/2015

20.5 Tag number marked on trunk with red paint pen, limited growing space, possible root obstruction
17
13.5
23.5
6.5
9.5
12.5
17.5
11
6.5
16.5
14
et) Landmark West Tree

Tree Solutions, Inc. 2940 Westlake Ave. N (Suite #200) Seattle, WA 98109



Date of Inventory: 06/15/2015
Table Prepared: 06/16/2015

7	Tree	Scientific Name	Common	DSH	Health	Structural	Drip	<b>Drip line Radius (feet)</b>	dius (fe		Landmark	200
=	D	Scientific Name	Name	(inches)	Condition	Condition	North	East	South	West	Tree	MOTES
												Tag number marked on trunk with red paint pen, girdling
2;	222 Ac	Acer platanoides	Norway maple	14.7	Fair	Fair	18.5	18.5	18.5	18.5		roots, root obstruction, sparse crown, top dieback on south side, bacterial flux at co-dominant union
	A Ps	Pseudotsuga menziesii	Douglas-fir	19	Good	Good		17				Letter marked on trunk with red paint pen
_	B Ps	Pseudotsuga menziesii	Douglas-fir	14.4	Good	Good		14.5				Letter marked on trunk with red paint pen
	C Ac	Acer saccharinum	Silver maple	14.2	Good	Good		24.5				Letter marked on trunk with red paint pen
	D Ac	Acer rubrum	Red maple	11.3	Good	Fair		11				Letter marked on trunk with red paint pen, girdling root, infrastructure obstruction
	E Ps	Pseudotsuga menziesii	Douglas-fir	19.2	Good	Good		14				Letter marked on trunk with red paint pen, history of crown raising
	F Ac	Acer pseudoplatanus	Sycamore	14.5	Good	Fair		20				Letter marked on trunk with red paint pen
	$G \begin{vmatrix} Ac \\ ps \end{vmatrix}$	Acer pseudoplatanus	Sycamore maple	12.6	Good	Good		18.5				Letter marked on trunk with red paint pen
_	H Ps	Pseudotsuga menziesii	Douglas-fir	20.5	Good	Good		22				Letter marked on trunk with red paint pen, history of crown raising
	l m	Pseudotsuga menziesii	Douglas-fir	16.3	Good	Good		16.5				Letter marked on trunk with red paint pen
	ρs	anus	Sycamore maple	15.2	Good	Fair		16.5				Letter marked on trunk with red paint pen
Ad	ddition	Additional notes:										

# Additional notes:

DSH (Diameter at Standard Height) is measured 4.5 feet above grade.

Multi-stem trees are noted, and a single stem equivalent is calculated using the average of all of the stems as per Redmond City Code.

Drip line is measured from the outermost portion of the trunk to the outermost extent of the canopy

Non-Significant tree

Landmark Tree

